

REMARKS

Rejection of Claims 1 and 3-24 under 35 U.S.C. § 103(a) as being unpatentable over US 2003/0119481 (Haverinen) in view of US 2003/0099219 (Abrol)

Haverinen refers to the process of authenticating a mobile station within a broadband access network (BAN) by re-using authentication capabilities built-into UMTS networks. A BAN gateway (BANGW) transmits system information to a mobile station. See Haverinen FIG. 1a and paragraph [0047]. The system information includes PLMN identifiers for PLMNs with which the BAN might connect. See Haverinen paragraph [0038]. The mobile station then selects a PLMN by comparing PLMN identifiers in the system information with PLMN identifiers in the mobile station USIM. See Haverinen paragraph [0042]. As mentioned in Haverinen paragraph [0022], the mobile station can select either a home network HPLMN or a roaming network PLMN.

After the mobile station has selected a PLMN, it can transmit a request to the BAN for setting up a connection with a network element according to the network element identifier linked with the PLMN identifier. See Haverinen paragraph [0043]. If the selected network PLMN cannot be used for some reason, the network selection can be carried out again as described above either automatically or manually. See Haverinen paragraph [0043].

The Office Action seems to be assuming that a subsequent network selection as described in Haverinen paragraph [0043] is equivalent to “an indicator to indicate whether a substitute public land mobile network is allowed,” as recited in claim 1, which would be included in a registration request message if the selected public land mobile network corresponds to a shared network. This assumption is incorrect. Haverinen clearly describes sequential single-selections of PLMNs without use of any indicator of whether a connection to a substitute PLMN is allowed. Haverinen presumes that another network selection attempt can always be made and thus there is no need for an indicator. (Transmitting an indicator in a registration request message

only makes sense if sometimes a second network is allowed and sometimes a second network is not allowed.) If Haverinen's first network selection is unsuccessful, then the flowchart simply returns to step 203 and the mobile station performs a second network selection. No indicator of whether a second network is allowed is needed, shown, or suggested by Haverinen.

Page 3 of the Office Action discusses forbidden PLMNs, which perhaps is being interpreted as an indication that substitute PLMNs are *not* allowed. This is also incorrect. Listing home, roam, and forbidden PLMNs in a mobile station USIM aids in network selection by the mobile station as discussed previously. The presence of forbidden PLMNs in a mobile station USIM does not mean that no second network can be selected (e.g., there may be one home PLMN, five roam PLMNs, and two forbidden PLMNs listed in the USIM, and if the home PLMN selection is unsuccessful there are still up to five roam PLMNs available).

Additionally, Haverinen fails to show or suggest "determining whether the selected public land mobile network identifier corresponds to a shared network" as recited in independent claim 1. Although Haverinen paragraph [0032] indicates that the BAN can be shared by several UMTS networks, nowhere does a Haverinen entity perform the step of "determining whether the selected public land mobile network identifier corresponds to a shared network" and then "including the indicator in the registration message, if the selected public land mobile network identifier corresponds to a shared network." In other words, according to claim 1, the results of the "determining" step are used to decide when to include the indicator in the registration request message. Haverinen shows no such link between a shared network and an indicator, much less a link between either of those to a registration request message.

As the Office Action admits on page 5, "Haverinen does not clear teaches on including the indicator in the registration request message . . ." This is because Haverinen does not need, show, or suggest "an indicator to indicate whether a substitute public land mobile network is allowed" and thus would not determine when

to include the indicator in a registration request message. Abrol does not overcome the acknowledged deficiencies of Haverinen.

First, Abrol (like Haverinen) does not discuss, suggest, or teach “setting an indicator to indicate whether a substitute public land mobile network is allowed.”

Second, because Abrol only contemplates a non-shared network situation, it (like Haverinen) does not show or suggest “determining whether the selected public land mobile network identifier corresponds to a shared network” as recited in independent claim 1. See FIG. 1 of Abrol which shows each RAN 130, 131 connected to a unique PDSN 140A, 140B.

Finally, even if the registration message of Abrol was taken out of context, and Abrol was combined with Haverinen to hypothetically register a mobile station to a PLMN through a BAN, any combination of Haverinen and Abrol still does not show or suggest “an indicator to indicate whether a substitute public land mobile network is allowed,” “determining whether the selected public land mobile network identifier corresponds to a shared network,” and “including the indicator in the registration request message, if the selected public land mobile network identifier corresponds to a shared network” as recited in independent claim 1.

Thus, claim 1 is not unpatentable over Haverinen and Abrol. Claims 3-9 and 24 depend directly or indirectly upon amended claim 1 and thus are also not unpatentable over Haverinen and Abrol.

Because there is no need, motivation, or teaching in Haverinen and Abrol to create a registration request message including a selected public land mobile network identifier and an indicator indicating whether a substitute public land mobile network is allowed as described in claim 1, then there is no need, motivation, or teaching in Haverinen and Abrol to extract a selected public land mobile network identifier and an indicator from a registration request message as recited in claim 10. Thus, claim 10 is not unpatentable in view Haverinen and Abrol. Claims 11-16 depend directly or indirectly upon claim 10 and thus are also not unpatentable over Haverinen and Abrol.

Independent claim 17 is not unpatentable over Haverinen and Abrol for the reasons outlined above, namely that Haverinen and Abrol do not show or suggest “determining whether the selected PLMNid corresponds to a shared radio access network (RAN); forming a registration request message with the selected PLMNid; including the indicator in the registration request message, if the selected PLMNid corresponds to a shared RAN; and transmitting the registration request message from the UE.” Haverinen’s BAN may form part of a shared radio access network, but nowhere does Haverinen show or suggest the step of “determining whether the selected PLMNid corresponds to a shared radio access network (RAN).” Instead, each PLMN selection of Haverinen is treated separately without reference to a shared BAN. See Haverinen paragraphs [0038]-[0043]. Claims 18-22 depend directly or indirectly upon amended claim 17 and thus are also not unpatentable over Haverinen and Abrol.

Regarding claim 23, Haverinen and Abrol fail to show or suggest “setting an indicator to indicate whether a substitute public land mobile network is allowed” and “including the indicator in the registration request message” as discussed previously. Thus, claim 23 is not unpatentable in view of Haverinen and Abrol.

Reconsideration and withdrawal of the rejection of claims 1 and 3-24 under 35 U.S.C. § 103(a) as being obvious in view of Haverinen and Abrol is respectfully requested.

Summary

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Should the Examiner have any questions, comments, or suggestions, the

Examiner is invited to contact Applicant's representative at the telephone number indicated below.

Please charge any fees that may be due to Deposit Account 502117, Motorola, Inc.

Respectfully submitted,

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